DRAFT DOCUMENT – NOT FOR IMMEDIATE IMPLEMENTATION
PENDING REVIEW AND APPROVAL OF THE COURT TECHNOLOGY COMMITTEE

Idaho Judicial Branch
Scanning and Imaging Guidelines

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A. Introduction

Many of Idaho's courts have considered or implemented the use of digital imaging systems to scan court documents in order to decrease physical storage space of paper documents or provide online access for court personnel to easily locate such documents. The majority of courts with this capability have implemented these systems to scan historical court records for archival purposes; however, a growing number of courts are scanning current, active records to ease access to and distribution of court files. Electronic court records management practices can provide a number of benefits to the courts, such as reduced costs for storage of obsolete records, reduced resources for the retrieval of records and greater accountability in the expenditure of funds related to records management.

Courts that elect to begin or continue to operate county sponsored and supported scanning processes should consider these guidelines in order to provide assurance of these processes and to provide greater uniformity of electronic court documents across Idaho's courts.

The Idaho Supreme Court is not mandating a transition to an electronic court record in the immediate, near-future. The Idaho Judicial Branch will transition to a new court case management system over the next 3 years which will include a fully integrated capability to capture, store, retrieve, and share records in an electronic environment. However, the Court recognizes the desire of many district and magistrate courts to begin or continue this transition to an electronic court record in the near term. Therefore, these guidelines are provided to:

1) aid courts in developing and managing digital scanning imaging systems that ensure electronic court records are authentic, reliable, have integrity, and are useable throughout the long-term retention period of the records, and;

2) provide practical guidance to courts in capturing, storing, retrieving, and retaining electronic court records in such a manner that they are useful within the new case management system.

Finally, these guidelines are designed for respective courts to review and ensure they have appropriately addressed the most critical aspects of scanning prior to disposing of historical paper-based court documents. The ability to ensure the long-term accessibility and usability of electronic court records is dependent on how the court's digital scanning imaging system is designed, implemented, and managed. Prior to moving away from an archived paper court record, courts must ensure they can retrieve the electronic court documents in accordance with all applicable court rules and retention requirements.

B. Responsibility

Courts must comply with Idaho statutes, Idaho Court Administrative Rules (specifically I.C.A.R. 31, 32, 37 and 38) and the associated retention periods for preserving, reproducing, and maintaining court records.

Maintaining records exclusively in electronic format requires a serious and ongoing commitment of financial and human resources for the life of the record. This commitment includes careful planning and implementation of a scanning and imaging system, routinely maintaining the required software and hardware used to create, process and store the electronic document, replacing media and system components as needed to ensure full operational use, and consideration of the long-term migration of documents to future systems.

Courts electing to rely solely on an archived electronic court document without the paper document must be confident in their management procedures and technology to ensure records are accessible for as long as they are required. Whether imaged or not, the ability to rely on records as evidence for legal, audit, and other purposes depends on establishing their authenticity and reliability. The court must also be able to prove that a recordkeeping system is consistently used as part of the normal course of business; this can be accomplished by documenting the specifications of the imaging system, training staff in the operation of the system, ensuring the integrity of the records, and conducting random audits.

Courts should further consult the retention charts in I.C.A.R. 37 and 38 to determine the minimum records to preserve as not all documents in a file are required for long-term preservation. This review could reduce the volume of scanning and imaging for archival purposes.

Courts should plan for local technology support of any new or existing county sponsored scanning and imaging solutions by using county IT personnel and/or local IT contractors. The Idaho Supreme Court's Information Division cannot support any county sponsored scanning and imaging solutions as it prepares for the transition to the new case management system and related infrastructure; however, the Division will provide consulting to counties as needed regarding these recommendations.

C. Access Controls

Courts should adopt procedures to protect electronic court records from unauthorized access. At a minimum, these procedures should include the following:

- Ability to restrict access to electronic court records based on an individual user account
- Prevent the use of shared or group user accounts to electronic court records; such accounts should not be used in order to provide individual accountability and auditing of access to such records
- Implement an access approval / revocation process to grant, modify or remove access for personnel (e.g. granting access for new employees, removing access for personnel leaving court employment, etc). Access approvals should be documented and approved by the clerk of the district court (or his/her designee, as designated in writing)
- Conduct periodic access reviews, at least every 6 months, to assure only authorized personnel have permissions to electronic court records. These reviews should be documented and reviewed by the clerk of the district court (or his/her designee)
- Provide logging of access to electronic court records

D. Sealed or Confidential Documents

Sealed or confidential cases/documents may be scanned similar to other court documents; however, security permissions must be applied to restrict file access to only authorized personnel. The appropriate technical security controls must be implemented to assure only specific personnel can access, copy, move or otherwise modify these documents.

These cases and/or documents must be appropriately electronically labeled to ensure personnel can clearly identify a sealed and/or confidential electronic court document.

E. Scanning Resolution

Electronic court documents are recommended to be scanned at 300 dpi. As the courts transition to a fully electronic court record in the new case management system, this level of resolution will ensure judges, court clerks and other users can fully access and read a legible document. This resolution will also enable these records to be processed using optical character recognition (OCR), if not scanned originally using OCR. At a minimum, any court records scanned after January 1st, 2015, should be scanned at this resolution. If a court has previously scanned documents at 200 dpi, the court does not need to rescan at this higher resolution.

Historical court documents being scanned solely for archive purposes which have a low probability of being accessed as an electronic court record in the new case management system may be scanned at a minimum of 200 dpi.

F. Scanning of Pictures and Preservation of Color

When scanning a document that has color, only scan the document in color if capturing actual photographs or if the color is required to maintain the evidentiary nature of the document. Scanning of pictures should adhere to the recommended resolution settings as described above.

G. Scanning Settings and Enhancements

Scan settings and image enhancement features within the scanning software may be used to improve the quality of the scanned document. Users of the scanning system should ensure appropriate quality of scanned documents and may need to modify the scan settings to ensure optimal output.

The use of features such as document alignment (skew), brightness, contrast, or image clarity are encouraged to produce a quality document. However, the use of such features must not alter the evidentiary nature of the document nor manipulate the document content and can only be used to ensure the quality of the scan.

H. File Format

As the Idaho Judicial Branch prepares for the new case management system and a transition to a fully electronic court record, courts are highly encouraged to scan and store electronic court documents in the PDF format. This format has been adopted as an ISO standard to assure long-term reliability of electronic documents. The PDF file format will be the standard in the new case management system, as this format provides a range of benefits with regard to archiving and content accessibility.

Courts may have historically scanned documents in the TIFF format, which is acceptable for archived electronic court records that will not be frequently accessed within the new case management system. Existing electronic court files previously scanned and stored in the TIFF format do not need to be converted to the PDF format. However, moving forward, it is encouraged that further scanning uses the PDF format. At a minimum, any court records scanned after January 1st, 2015, should be scanned and saved in the PDF file format.

I. Indexing / File Names

A standardized index and file naming protocol should be used within the electronic court record scanning process. Retrieval of electronic court documents is entirely dependent upon effective indexing and is vital to the success of the scanning effort.

At a minimum, the electronic court records should be indexed by case number. When selecting a file naming protocol, the file name should include the case number. It is also recommended that the index and/or file naming protocol include the names of defendants and plaintiffs, if possible.

A determination on which existing electronic case files (e.g. number of years back, etc) that will be converted into the new case management systems is still to be determined; however, courts should be aware that electronic case files that are not indexed and/or named with the case number will not be transitioned to the new case management system.

J. Metadata

Metadata is a standardized structure format and control vocabulary which allows for the description of record content, location, and value. In other words, metadata is used to describe “data about data.” This metadata is often used to assist users in locating, retrieving and managing electronic records.

When possible, the electronic court record should preserve the metadata created for the specific file stored (such as the date the document was created, etc). Often, scanning systems may prompt the user to add metadata. Where possible, it is recommended the following data be included in the metadata of the scanned documents to assist with case or document retrieval and for potential conversion of these records into the new case management system: case number, plaintiff name, and defendant name. Additional metadata may be maintained as determined by local court practice (such as filing date).

K. Optical Character Recognition (OCR)

Optical character recognition (OCR) is the conversion of scanned images into text so that the resulting documents can be easily searched. OCR is not recommended for the purpose of archiving older court records. If a court is scanning older case files that have low probability of being accessed in the new case management system, OCR should not be implemented. However, to enable full features within the new case management system, court case files scanned after January 1, 2015, should be scanned with OCR enabled (if supported by the local court's scanning system/software). This will provide maximum usability options of electronic court records by judges, clerks and other court personnel.

Various scanning systems and/or applications may have degrees of OCR features (e.g. basic, medium, advanced, etc). The differences in OCR features are typically designed to balance the amount of time needed to OCR a document with the accuracy of the OCR process. Users should conduct appropriate testing to determine the preferred setting for their respective scanning system and/or application to ensure the OCR output has properly converted the image into text.

L. Compression

File compression as part of the scanning process is not recommended.

M. Scanning Process and Quality Control

When preparing documents for scanning, courts should remove all unnecessary paperwork, thereby leaving the remaining paperwork in a format that can be efficiently processed through the scanning system. As an example, all staples should be removed (using a flat staple remover), removal of "sticky" notes, papers placed in proper order and organized to make file scanning more efficient.

Care must be taken when scanning frail documents. The automatic feeder of a scanner can damage such documents; therefore, it is recommended frail documents are scanned using a flat-bed scanner, if possible. If needed, use a photocopier to create a better scanning copy of the document.

If a document is physically larger than a letter-size paper, scan up to 11x17 ledger size. If larger documents (e.g. 24x36 drawing or map) need to be scanned, segment the document into 11x17 sections and scan from left to right, top to bottom, in order.

The individual performing the scanning process should check each page as processed to make sure the item was scanned properly. This quality control review should include checking for overall legibility, completeness of detail, accuracy compared with the original, missing pages, pages being out of order, skewed images, poor image quality, image rotation, image cropping, index data accuracy, and file name format compliance. Additional quality control criteria may be set by the local court.

N. Quality Assurance

A quality assurance process should be established by the local court to ensure the electronic court record adheres to the quality control criteria identified above (and any additional criteria defined by the local court).

This quality assurance process is intended to validate the electronic court record has fully met the quality control criteria before any original, paper documents are destroyed. This quality assurance process is absolutely critical to integrity of the original paper court record in the electronic form and is an essential final step to assure this integrity prior to irrevocable actions taken on the original paper document(s).

O. Training

It is imperative that training and educational processes be documented and implemented to ensure the system operates properly and that court personnel correctly follow established written procedures.

Any training conducted should be documented to provide validation of training performed and to assist in the tracking of which personnel are trained. Re-training should be conducted for all users involved in the scanning process on an annual basis.

P. Documentation of the Imaging System and Process

Courts should fully document their scanning process to ensure consistency amongst those creating electronic court records. A standard operating procedure should be documented and used for training and auditing of the scanning process. This procedure should include at least the following descriptions, how to:

a.) test and clean equipment;
b.) prepare documents;
c.) capture documents using the scanning solution;
d.) back up data;
e.) provide access and security;
f.) administer and maintain the system; and
g.) provide audit trails.

Documentation should also include any vendor-related documentation of the imaging system and/or software and any related contracts, specifications and approvals, version number and dates of installation, upgrades, replacements, conversions, reports of inspections, audits, and related general documentation. Courts should also clearly document contact information for manufacturers and vendors.

Q. Contractor

If an independent contractor, consultant, or other party outside of government produces a reproduction of a record for a court, the court shall ensure that the party acts in compliance with these guidelines and standards, and any local court practices. A court may ensure compliance through execution of a contract that contains adequate legal safeguards.

R. Auditing

The clerk of the district court should be able to testify as to the trustworthiness of the scanning and imaging system through an internal audit process. The clerk (or his/her designee) should monitor the imaging system and scanning process to assure it meets the record and retention requirements. The clerk should take the necessary steps to assure that personnel are consistently performing procedures and that all documents are handled the same with a consistent quality of work.

At a minimum, as described in section M - Scanning Process and Quality Control, the scanning process should include an active auditing process in which the individual performing the scanning process checks each page as processed to make sure the item was scanned properly. Further recommendations regarding this process are identified in this referenced section.

To provide a greater level of assurance in the organization's scanning program and procedures, the clerk may elect to implement two additional types of internal audits. If implemented, it is recommended these audits are conducted quarterly by either the clerk or a designated employee that is not an active member of the scanning process. These audits should be documented to include the date, personnel involved and results:

a. Select representative cases files and conduct a system inspection following the entire scanning process from start to finish. This should include inspecting the electronic documents created and comparing these images to the originals. By so doing, the clerk (or his/her designee) will be able to verify the system accurately and reliably produces electronic court records that meet trustworthiness and evidentiary standards.

b. Select a sampling of electronic court documents that have been scanned over the previous quarter (or otherwise defined period of time) and conduct a verification that the electronic court record is fully legible and complete, in accordance with local procedures and court rules.

Any issues or deviations identified in these audits should be clearly documented and tracked. Resolution actions and dates should also be reflected as issues or deviations are settled.

S. Software and Hardware Maintenance / Inspections

On an annual basis, the clerk (or his/her designee) should ensure the associated computer hardware, software, and storage equipment used for the scanning and imaging process is reviewed by a qualified person. This review should check for the currency of the technology, release levels, and service patches, as well as the overall operational health of the system.

Scanners should also be serviced annually to ensure optimal performance. On a periodic basis, courts should clean the scanner rollers and scanning glass.

T. Electronic Storage

When designing the storage solution as part of a scanning system and process, the court must consider several factors including retrieval-time requirements, records retention, local capabilities and support

options. Storage of the electronic court record will be dependent on the available technology options to the respective court. The clerk (or his/her designee) should work with the appropriate information technology representatives (e.g. county IT personnel, contractors, etc) to determine the preferred storage solution for the scanning process.

Typically, such storage systems are designated in three categories: online; near line; and offline. The type of storage system selected will depend upon how fast and how often the court must access the electronic court records. Online storage (or often referred to as primary storage) means the electronic record can be displayed in a matter of seconds and is typically stored on storage area network (SAN), virtualized storage pool, or file server. This type of storage is preferred for electronic court records that will need to be accessed on a semi-frequent basis. Near-line storage means the electronic record is stored in a less expensive storage device, and typically uses network attached storage (NAS), a backup file server or an existing SAN. Near-line storage options are typically used for electronic court records that will not be accessed as frequently. Offline storage means the image file resides on media (such as optical disks or data tapes) that requires human intervention to load into a system drive. This storage mechanism should be used primarily for archive purposes of inactive records. A combination of storage options should be used to provide redundancy of data in case one of the storage options fails.

On a periodic basis, dependent upon the size of the storage capacity of the system storing the electronic court documents, the system should be assessed for adequate storage availability. This process is to ensure that the court is adequately planning for and managing available storage for additional electronic court records.

U. Backups

When retaining electronic court records, the clerk (or his/her designee) should validate that the records are appropriately backed up on a period basis. Full, frequent, and regular backing up of electronic court records and indexes is a critical operating procedure to ensure data protection and information trustworthiness. Storage of these backups should be off-site in a secure, fire-safe facility. Because the environmental tolerances for storage of electronic media vary greatly, the manufacturer's specifications should be followed. These specifications should include adherence to temperature, humidity, and other environmental specifications.

At a minimum, the entire electronic court records system and associated components should be backed up on a weekly basis. The court should move the weekly backup to the secure off-site location. Daily changes made to the system should be backed up incrementally.

The system administrator should conduct a recovery test every 6 months to ensure electronic court records can be restored from an existing full backup. This will ensure the system can accurately and reliably produce and re-produce electronic court records that meet trustworthiness and evidentiary standards. Documentation of the test results should be completed and provided to the clerk.

V. Contingency Planning

System failure is always a possibility. Courts should have a contingency plan in place to provide guidance if the system fails. At a minimum, the plan should indicate how soon the vendor or IT support staff can be onsite, procedures for users while the system is down, and actions to be taken by court staff.

This contingency plan should include a documented disaster recovery strategy that includes standard backup and recovery procedures, as well as quality control and storage procedures such as those mentioned previously. In the case of a disaster, maintaining off-site copies of records may be the only answer for recovering data. A test of both the prevention and data recovery guidelines should be conducted on a regular basis.

W. Migration

It is vital that local courts have a strategy in place for the migration of electronic court records, as needed, when technology and/or storage media components change. Electronic media can be less stable than paper because digital storage media and rapid changes in computer technology are constant. Therefore, a conversion strategy for retaining and retrieving stored information should include a migration process to transfer digital information from one generation of hardware and software to the next. Migrations must be carefully planned, executed, and audited to ensure against data loss. Although migration is a time-consuming and expensive process, with proper strategies in place, the costs can be minimized. The local court must keep this critical aspect in mind as they develop and manage their scanning and imaging process.

X. Public Access to Electronic Court Records

A court should carefully plan for public access to its electronic court records. The technical ability to provide access must be balanced against the court's legal obligations concerning information that may be contained in the electronic court record. Technical access can be provided to the public through kiosks in a court's lobby or other alternatives. Less direct access can be provided by permitting users to order copies of electronic courts records that are referenced in a court's digital register of actions. Statutory and court rule requirements must be met while providing public access to documents.

Images of documents from case files should not be posted to the Internet. As part of the new case management system, the Idaho Supreme Court will develop appropriate policies, procedures and technical controls to provide access to such documents in the future from the Internet.

Y. Conclusion

These scanning and imaging guidelines provide an overview to many of the issues a court will face when planning, selecting, implementing and managing a scanning and imaging system. These guidelines and standards are not intended to be exhaustive; however, they are intended to be used as a starting point for courts to reference as they assess their scanning imaging options or existing practices. Courts and court staff should direct questions to Idaho Supreme Court's Information Division for any further clarification or input.